# นิพนธ์ต้นฉบับ

## Social value on newborn circumcision

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Sanpawat S. Social value on newborn circumcision. Chula Med J 1990 Oct; 34(10):763-767

Newborn circumcision in Chulalongkorn hospital is usually done when the infant's general condition is stable, prior to his discharge. There were 87 cases in the period of 27 months. Most mothers who wanted their sons circumcised were well educated, and all belonged to the upper and middle socioeconomic classes. Their medical care were provided by private obstetricians, and half of them paid their own medical expenses. All except three newborns were fullterm infants; half of them were the first child of the family. To fascilitate personal hygiene was the most frequent reason the mothers cited for requiring this procedure. The other reasons included prevention of penile diseases and of the need for circumcision in childhood or adult life. Social reasons were not a major influence in their decision. Only 1% of the mothers followed the physician's advice of circumcision done in the neonatal period. Most of the mothers did not possess any understanding about the complications associated with the surgery. Therefore counseling and educational programme regarding the newborn circumcision should be initiated for the parents during the prenatal period, so that a clear consideration and proper decision could be made.

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Received for publication. July 27, 1990.

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สุวิมล สรรพวัฒน์. ทัศนคติของมารดาต่อการขลิบหนังหุ้มปลายอวัยวะเพศ. จุฬาลงกรณ์เวชสาร 2588 ดุลาคม, 34 (10) : 768-767

การขลิบหนังหุ้มปลายอวัยวะเพศในทารกแรกคลอดเพศชายในโรงพยาบาลจุฬาลงกรณ์นั้น ทำเมื่อทารกอยู่
ในสภาวะปกติ ก่อนที่จะจำหน่ายอกจากโรงพยาบาล การศึกษาสภาวะทางสังคม เศรษฐฐานะ และเหตุผลที่มารดา
ต้องการให้บุตรของตนขลิบหนังหุ้มปลายอวัยวะเพศจำนวน 87 คน พบว่าร้อยละ 55 ของมารดาเป็นผู้มีการศึกษาใน
ระคับปริญญา มารดาส่วนมากมีเศรษฐานะดีพอที่จะฝากครรภ์กับแพทย์ประจำ ร้อยละ 86 เข้ารับการรักษาในระดับ
ห้องพิเศษ และครึ่งหนึ่งของมารดาเหล่านี้จ่ายค่ารักษาพยาบาลด้วยตนเอง อีกครึ่งหนึ่งสามารถเบิกได้จากนายจ้างหรือ
เบิกบางส่วนจากหน่วยราชการ ในจำนวนทารกที่ได้รับการขลิบหนังหุ้มปลายอวัยวะเพศนั้น ร้อยละ 56 เป็นบุตร
คนแรกของครอบครัว และมีเพียง 3 รายที่จัดอยู่ในทารกน้ำหนักตัวน้อย การรักษาและทำความสะอาคอวัยวะเพศง่าย
เป็นเหตุผลบ่อยที่สุดที่มารดาต้องการให้บุตรของตนขลิบหนังหุ้มปลายอวัยวะเพศ รองลงมา ได้แก่ การป้องกันโรคและ
เพื่อมิให้ต้องทำศัลยกรรมนี้เมื่อเด็กโตขึ้น การทำตามสภาวะสังคมและสิ่งแวคล้อมนั้นพบน้อย และเพียงร้อยละ 1
เท่านั้นที่ให้เหตุผลว่าทำตามคำแนะนำของแพทย์ ในจำนวนมารดา 54 ราย มีเพียงร้อยละ 24 เท่านั้นที่ทราบว่าอาจ
เกิดปัญหาแทรกข้อนหลังการผ่าตัก จึงจำเป็นต้องอธิบายและให้ความรู้เกี่ยวกับผลดีผลเสียตลอดจนปัญหาแทรกข้อน
จากการขลิบหนังหุ้มปลายอวัยวะเพศให้บิดามารดาทราบ โดยเฉพาะในระยะก่อนคลอดเพื่อใช้ประกอบการตัดสินใจ
ว่าจะให้บุตรของตนขลิบหนังหุ้มปลายอวัยวะเพศในระยะแรกเกิดหรือไม่

The committee on the Fetus and Newborn of the American Academy of Pediatrics in 1975 stated that "there is no ablolute medical indication for routine circumcision of the newborn". (1) The topics are still to be debated. There have been many studies and comments either supporting or against neonatal circumcision. (2-6) The effect of counseling and educational intervention produce conflicting datas on the rate of neonatal circumcision. (7-10)

At Chulalongkorn hospital, newborn circumcision is usually performed in the nursery prior to the infant's discharge. Although most of the circumcision are done by the neonatologists, they rarely play a role in the parents' decision to have their sons circumcised. The pros and cons of neonatal circumcision are rarely discussed in the postnatal period. The parents' reasons and attitude are unknow. This study is undertaken to examine the social status, reason and medical perception of the mothers regarding the newborn circumcision.

### Material and method

A brief questionaire was presented to the mothers who elected to have their sons circumcised from June 1986 to August 1988. The questions were asked concerning

the parental education, the prenatal care, the expense of the delivery, the gravida and the birthweight of the newly born son, the circumcision status of the elder son, the knowledge and the reasons for the preference regarding the circumcision. The procedure that was done for religious reason was excluded.

#### Results

There were 99 cases of circumcisions during the period of 27 months. Twelve cases were Moslems and were excluded from the study. Of the remaining 87 cases, 60% of the mothers attended the prenatal care with their private obstetricians. Upon delivery, 76 mothers (87%) occupied private rooms, and 11 (13%) were in semiprivate wards. Half of the parents paid for their own medical expenses, including the circumcision. Among the other half, the expenses were paid for partly by the government (in the cases of civil servants) or by their employees. About the maternal educational levels, 55% were college graduates, 37% completed high school, and 8% the elementary level.

The birth weight of these infants are shown in table 1. There was no infants weighing less than 2300 grams.

Table 1. Number of the infants according to birth weight.

Weight (grams)	no.	percen
> 3000	61	70
2500-3000	<b>23</b>	26
< 2500	3	4
Total	87	100

Table 2. Mother's reasons for preference of circumcision.

Reasons	no.	percent
Personal hygiene and cleanliness	82	38
Prevention of penile disease	52	24
Avoidance of later circumcision	30	14
Circumcised fathers or brothers	20	9
Social reasons	16	7
Prevent disease in the child's future partner	14	. 7
Physician's advice	2	1
Total	216	100

Fifty six percent of the infants were first-born, 33% were the second child and 11% the third child of the family. The mothers' reasons to have their son circumcised are summarized in table 2. More than one seasons were given.

Thirty nine infants were the second or third child of the family. Eighty percent of these families had their previous sons circumcised. All mothers except one recalled no problems after the procedure. Only one case developed wound swelling that needed medical attention.

Of the 54 cases which responded to the question whether they were aware of risk associated with the practice, only 13 mothers (24%) stated that they knew about the possibility.

## **Discussion**

History of circumcision dates as far back as ancient Egypt<sup>(11)</sup>. While some historians claim that circumcision was a religious rite performed on royalty, others believe it was used as a mark of slavery. (12) The rate of circumcision varies, depending on the race, age, culture, religion and social class; with the USA, Canada, and Australia ranking among the highest. (12) There are indications to justify neonatal circumcision such as prevention of penile cancer, balanitis, future phimosis, paraphimosis and reduction of Herpes gentialis. (13) Complications relate to the procedure are bleeding and infection, either local or systemic. (11,12,14) Staphylococcal scalded skin syndrome, (15) gangrenous infection of the scrotum or penis and perineum (Fournier's syndrome)<sup>(16)</sup> and hematogenous osteomyelitis<sup>(17)</sup> were reported. Poorly performed surgery in an inexperienced hand can cause scarring, penile denudation, or even lead to second circumcision to correct phimosis secondary to inadequate removal of the mucosa. (4,11,12,14,18,19)

In this study, most of the mothers were well educated, and all were of upper and middle socioeconomic status, therefore they could afford the private physicians and paying their medical expenses. All except 3 infants weighed more than 2500 grams. Although the 3 infants, whose birth weight were between 2300-2500 grams, were in the group of low birth weight; it was uncertain whether they were also premature. Nevertheless, the circumcision was done when their comditions were stable and they were ready to be discharged.

To fascilitate personal hygiene is the most frequent reason the mothers cited to have their sons circumcised. This is similar to the study of Metcalf. (20) Although some authors advocated circumcision because adequate penile hygiene was unlikely, (12) other were against it. (21)

Prevention of penile disease is the second leading reason. There is evidence that carcinoma of the penis can be prevented by neonatal circumcision, (1,12) however other factors such as poor hygiene and certain sexually transmitted diseases also correlate with the incidence of penile cancer. (22) Recurrent balanitis were the condition found more common in the uncircumcised children. (23) Recently there have been informations suggesting that newborn circumcision may decrease the incidence of urinary tract infection. (24-26)

Social reasons, incliding the advice of relatives and friends and circumcision status of the fathers or brothers were not the frequent reasons given by the mothers. As for the cervical cancer link to uncircumcised men, the evidence from a careful study is not convincing. (27)

Thirty mothers (14%) stated that they wanted to avoid requirement of circumcision in the future. While the phimosis in the neonatal period is physiologic, 90% of the foreskin become retractable at the age of three. (11) Only 10% will develop true phimosis and need this procedure done later. It is not possible to predict which infant will subsequently develop nonretractile foreskin. To do circumcision for this reason means to subject 90% of infants to the unnecessary risk of surgery. On the other hand, later circumcision is costly, causes greater risk and possibly leads to some psychological effects. (11)

Considering that half of the mothers were giving birth to their first son, were inexperienced in child-rearing, and only some decisions were based on social or paternal and fraternal circumcision status, it was surprising that only 2 mothers (1%) made their decision according to the physician's advice. One could argue that they were mostly well-educated and knew about the benefit of this surgery, but it was possible that the other important reason was the physician's informations, which did not become apparent in the questionaire.

Finally most of the mothers did not possess any clear understanding of the complications associated with the procedure, including the two mothers who were influenced by their physicians' advice. From this study it is not possible to determine whether the mothers had received counseling and discussion regarding the risk and benefit of neonatal circumcision. If the information were indeed given in the immediate postnatal period, it is understandable that the mothers might not perceive them.

#### Conclusion

Newborn circumcision has potential medical benefit and advantages as well as risks and disadvantages.

While there is still no definite indication and the decision is left to the parents, counseling and education should be discussed during the prenatal care, when the parents can consider the matter clearly. For the ones who do not want circumcision, recommendation about proper hygienic care is indicated.

#### References

- Committee in Fetus and Newborn. Report of the Ad Hoc Task Force on Circumision. Pediatrics 1975 Oct; 56(4): 610-11
- Dagher R, Selzer ML, Lapides J. Carcinoma of the penis and the anticircumcision crusade.
   J Urol 1973 Jul; 110(1): 79-80
- 3. Kochen M, McGurdy SA. Circumcision. Am J Dis Child 1979 Oct; 133(10): 1079
- 4. The case against neonatal circumcision. Br Med J 1979 May 5; 1(6172): 1163-4
- 5. Ichter JT. Neonatal circumcision. Pediatrics 1984 Jan; 73(1): 110-1
- 6. Gellis SS. Circumcision. Am J Dis Child 1987 Dec; 132(12): 1168-9
- 7. Herrera AJ, Hsu AS, Saldcedo UT, Ruiz MP.
  The role of parental information in the incidence of circumcision. Pediatrics 1982 Oct; 70(4): 597-8
- 8. Maisels MJ, Hayes B, Conrad S, Chez RA. Circumcision: the effect of information on parental decision making. Pediatrics 1983 Mar; 71(3): 453-5
- Rand CS, Emmons C, Johnson JWC. The effect of an educational intervention on the rate of neonatal circumcision. Obstet Gynecol 1983 Jul; 62(1): 64-7
- 10. Gorske AL. Circumcision and patient education.
  Am J Dis Child 1980 May; 134(5): 527
- 11. Lubchenco LO. Routine neonatal circumcision: a surgical anachronism. Clin Obstet Gynecol 1980 Dec; 23(4): 1135-40
- 12. Warner E, Strashin L. Benefits and risks of circumcision. Can Med Assoc J 1981 Nov 1; 125(19): 967-76
- 13. Thompson HC. The valus of neonatal circumcision.

  Am J Dis Child 1983 Oct; 137(10): 939-40
- Grimes DA. Routine circumcision of the newborn infatn: a reappraisal. Am J Obstet Gynecol 1978 Jan 15; 130(2): 125-9
- Annunziats D, Goldblem LM. Staphylococcal scalded skin syndrome: a complication of circumcision.
   Am J Dis Child 1978 Dec; 132(12): 1187-8

- Sussman ST, Schiller RP, Shashikumar VL. Fournier's syndrome. Am J Dis Child 1978 Dec; 132(12): 1180-01
- 17. Kirkpatrick BR, Eitzman DR. Neonatal septicemia after circumcision. Clin Pediatr 1974 Sep; 13(9): 767-8
- Sotolongo JR, Hoffman S, Gribetz ME. Penile denudation injuries circumcision. J Urol 1985 Jan; 133(1): 102-130
- 19. Gee WF, Ansell JS. Neonatal circumcision. A ten-year overview: with comparison of the Gomco clamp and the Plastibell device. Pediatrics 1976 Dec; 58(6): 824-7
- Metcalf TJ, Osborn LM, Mariani M. Circumcision.
   A study of current practices. Clin Pediatr 1983
   Aug; 22(8): 575-9
- 21. Colletti RB. Circumcision. Am J Dis Child 1979 Oct; 133(10): 1080
- American Academy of Pediatrics. Report of the Task Force on Circumcision. Pediatrics 1989 Aug; 84(4): 388-91
- 23. Herzog LW, Alvarez SR. The frequency of foreskin problem in uncircumcised children. Am J Dis Child 1986 Mar; 140(3): 254-6
- Wiswell TE, Smith FR, Bass JW. Decreased incidence of urinary tract infections in circumcised male infants. Pediatrics 1985 May; 75(5): 901-3
- 25. Wiswell TE, Enzenauer RW, Holton ME, Cornish JD, Hankins CT. Declining frequency of circumcision: implications for changes in the absolute incidence and male to female sex ratio of urinary tract infections in early infancy. Pediatrics 1987 Mar; 79(3): 338-42
- Herzog LW. Urinary tract infection and circumcision.
   A case-control study. Am J Dis Child 1989
   Mar; 143(3): 348-50
- Terris M, Wilson F, Nelson TH. Relation of circumcision to cancer of the cervix. Am J Obstet Gynecol 1973 Dec 15; 117(8): 1056-66